

Python

Syntax

English → Grammatical Rules

Primitive

Data Structures

Non-Primitive
Data Structures

→ Efficient code

→ Less memory and easy to code.

1. 1
2
3
4
5

1500

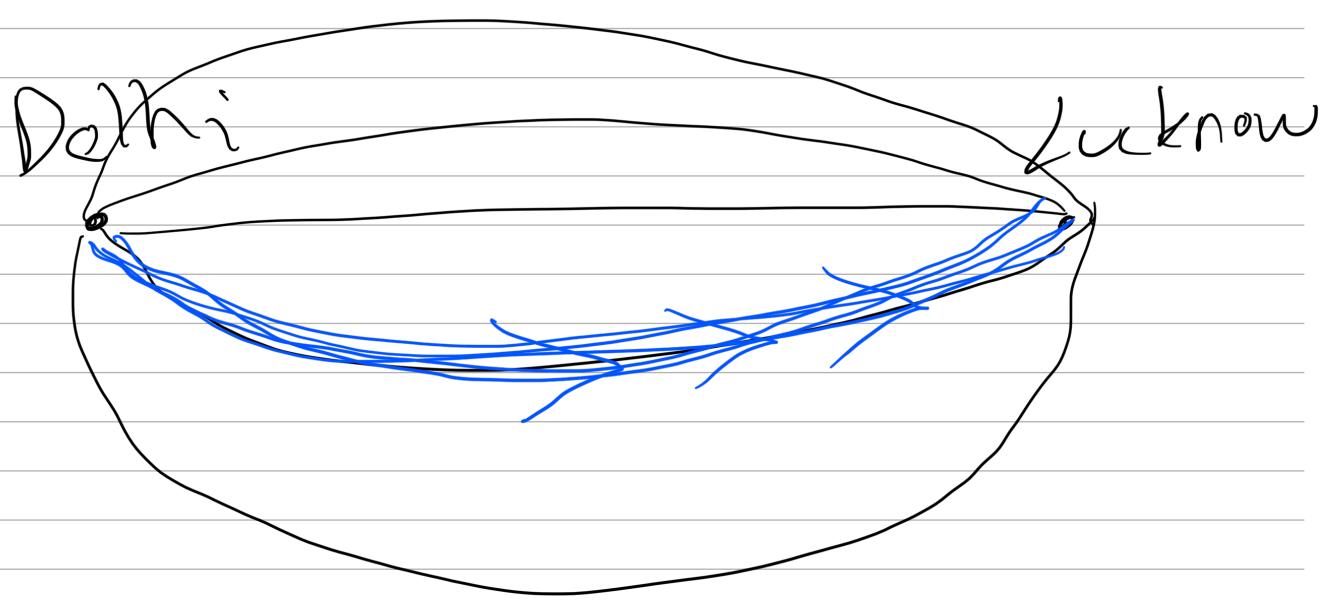
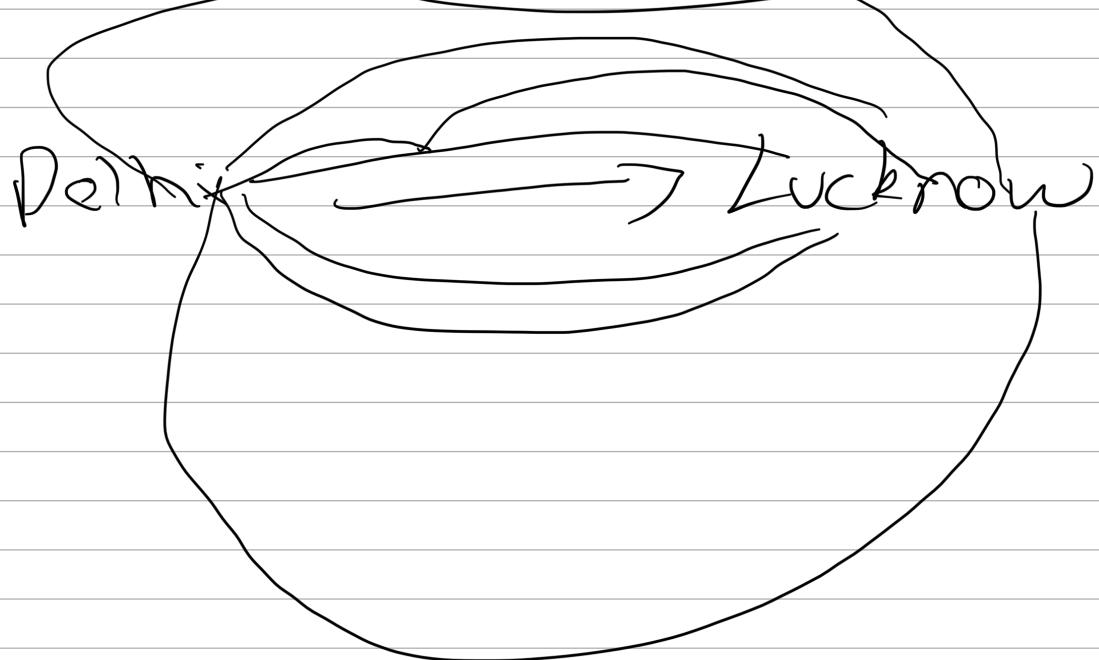
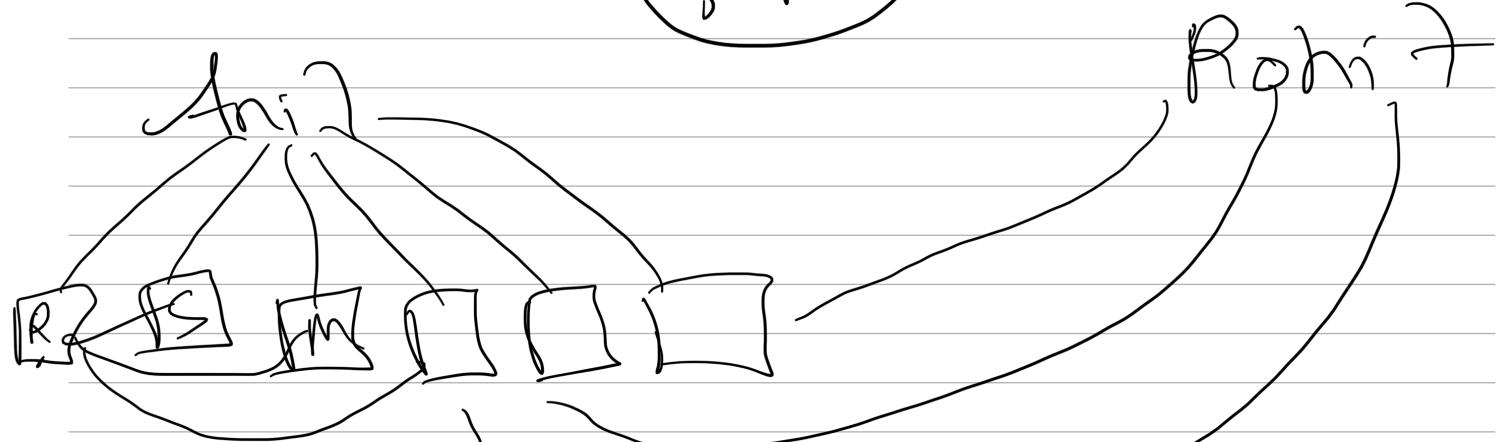
100

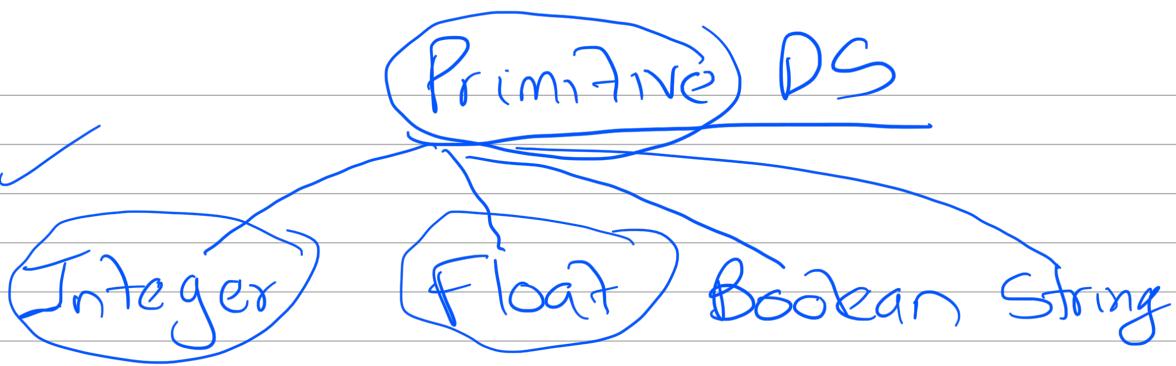
1800

1550

1500

FB





5 6, 7

3, 4, 11, -1, -7, -9

Integers: Numbers ranging from $-\infty$ to ∞

1.3, 1.7, 1.9, 2.1, 11.3317
5.13, 7.111

Decimal No = float

→ Boolean

Yes → True

No → False

(3 == 5)

(11 != 7)

11 not equal to 7 T

No = float, Integer

Text data

String = 'My name is Inde'

"

"

'''

'''

Amazon

' Welcome to the Session '

' Welcome Inde '

"

"

input

Output

input ('Please enter your name')

int (input ('Please enter a no'))

Please enter a no 5

15

Output

print (' My name is Deepak ')

My name is Deepak

Strings

`s = 'My name is Jinder'`

Index Starts
= 0

'My name is Jinder'
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

i = 9

'My name is Rohit'
0 1 2 3 4 5 6 7 8 9 17, 18, 19

'Welcome -- to the ()! session'

Slicing in String

Extracting a substring from the main string

'Upgrad' str[3:4] Upgrad
0 1 2 3 4 5 4

`str[3:4]`

`[2:4]`

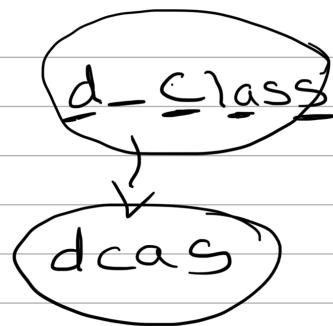
`[start : end+1]`

'Welcome to the }Session' (7:15)

(7:15:2)
Start End Jump of characters

'to-the-' -ote

$\text{str} = \text{'Upgrad Class'}$
0 1 2 3 4 5 6 7 8 9 10 11
 $\text{str}[5:11:2]$
= 'dcas'



'd Clas'
0 1 2 3 4 5
d₉

0+2

2+2

4+2

$\text{str}[0:\text{len}(\text{str})+1]$

$\text{str} = \text{'Inder(preet Singh)'}$
0 1 2 3 4 5 6 7 8 9 10 11 12 13
I
 $\text{str}[5:13:2]$

$13-1 = 12$

$\text{str}[$

preet_Si
0 1 2 3 4 5 6 7

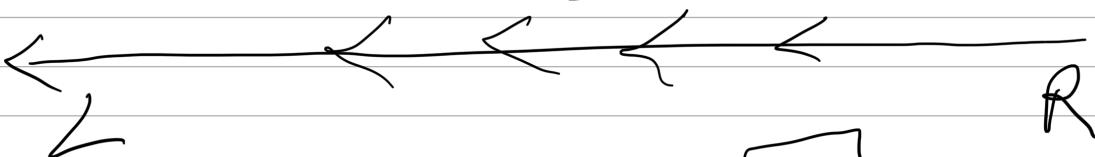
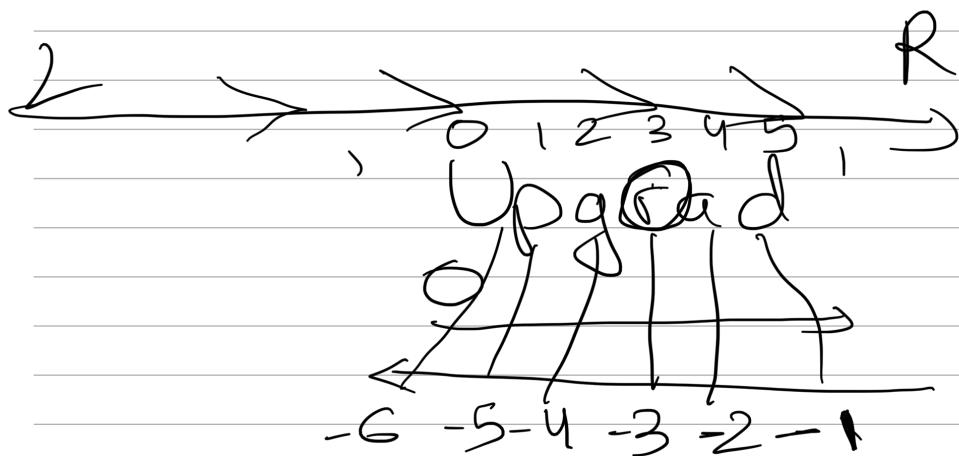
petS

$\text{str} = \text{'Upgrad'}$ → 6
0 1 2 3 4 5
 $\text{len}(\text{str}) = 6$

6

+1

Upgrad → len(s)
~~0 1 2 3 4 5~~
~~str[0 : len(str)]~~



'J y o t h i s h'
~~-8 -7 -6 -5~~ [S:E]
~~[Start : End]~~

I_3
~~-6 -5 -4 -3 -2 -1~~ -1 > -3
 1 Upgrad'

str[-4:-2+1]

[-4:-1]

Upgrad

[-4:_]

grad

str = Upgrad
-6 -5 -4 -3 -2 -1

$$L \rightarrow R = \text{str}[1:4]$$

R[0:2] = str[-5:-2]

str 'Data Science - is the Future'

L to R : str[6:21]

R to L

' Data Science is the future '

1

8

$$\text{答 } T = 20 : -6 + 17$$

str [-20 : -5]

4

'Hello'

'Hello'